

AMENDMENTS TO THE CLAIMS

This listing of claims supersedes all prior versions and listings of claims in this application:

LISTING OF CLAIMS:

1. (Currently Amended): A three-dimensional image display device, comprising:
a display panel where a plurality of pixel sections, which include pixels displaying an image for the right eye and pixels displaying an image for the left eye, are arrayed in [[a]] matrix state form; and
an optical unit that emits light emitted from the pixels displaying said image for the right eye and light emitted from the pixels displaying said image for the left eye in directions different from each other,
wherein, when ~~the~~ a distance in the normal direction from a ~~between the most distant point from~~ of said display panel to a viewer's midpoint is within ~~in~~ a three-dimensional visible range, ~~where then~~ the light emitted from the pixels displaying said image for the right eye is made incident to said right eye and the light emitted from the pixels displaying said image for the left eye is made incident to said left eye by positioning a midpoint between a viewer's right eye and left eye in ~~the~~ a normal direction from said display panel within said three-dimensional visible range, and

wherein said display panel is set ~~to~~ at a distance D (mm), from the midpoint, and the definition of said pixel sections in at least one array direction out of the perpendicular array directions of said pixel sections of said display panel is set to X (dpi), and

where said distance, D, and said definition, X, satisfy the following expression[[]]:

$$X \geq \frac{25.4}{D \times \tan(1')}$$

2. (Currently Amended): The three-dimensional image display device according to Claim 1, wherein when the definition of said pixel sections in another array direction, which crosses said one array direction out of the perpendicular array directions of said pixel sections, is set to Y (dpi), said distance D, and said definition Y, satisfy the following expression[[]]:

$$Y \geq \frac{25.4}{D \times \tan(1')}$$

3. (Original) The three-dimensional image display device according to Claim 1, wherein said display panel is a liquid crystal display panel.

4. (Original) The three-dimensional image display device according to Claim 1, wherein said optical unit is a parallax barrier where a plurality of slits, which are arranged for each row of said pixel sections and extend along an extending direction of the row, are formed.

5. (Currently Amended): The three-dimensional image display device according to Claim 1, wherein said optical unit is a lenticular lens that is arranged on the viewer side of said display panel, provided with a plurality of cylindrical lenses arranged for each row of said pixel sections and extended ~~along an extending~~ in a row direction ~~of the row~~.

6. (Currently Amended): A three-dimensional image display device, comprising:
a display panel where a plurality of pixel sections, which include pixels displaying an image for the right eye and pixels displaying an image for the left eye, are arrayed in ~~[[a]]~~ matrix ~~state~~ form; and

optical unit that emits light emitted from the pixels displaying said image for the right eye and light emitted from the pixels displaying said image for the left eye in directions different from each other,

wherein the distance in the normal direction from a ~~between the most distant point from~~ of said display panel to a viewer's midpoint is within ~~in~~ a three-dimensional visible range, where the light emitted from the pixels displaying said image for the right eye is made incident to said right eye and the light emitted from the pixels displaying said image for the left eye is made incident to said left eye by positioning a midpoint between a viewer's right eye and left eye in ~~the a range, and said display panel is of~~ 500mm or more, and the definition of said pixel sections in at least one array direction out of the perpendicular array directions of said pixel sections is 175 dpi ~~[[ore]]~~ or more.

7. (Original) The three-dimensional image display device according to Claim 6, wherein the definition of said pixel sections in another array direction, which crosses said one array direction out of the array directions of said pixel sections, is 175 dpi or more.

8. (Original) The three-dimensional image display device according to Claim 6, wherein said display panel is a liquid crystal display panel.

9. (Original) The three-dimensional image display device according to Claim 6, wherein said optical unit is a parallax barrier where a plurality of slits, which are arranged for each row of said pixel sections and extend along an extending direction of the row, are formed.

10. (Currently Amended) The three-dimensional image display device according to ~~Claims~~ Claim 6, wherein said optical unit is a lenticular lens that is arranged on the viewer side of said display panel, provided with a plurality of cylindrical lenses arranged for each row of said pixel sections and extended along an extending direction of the row.

11. (Original) The three-dimensional image display device according to Claim 1, wherein said device displays a three-dimensional moving picture.

12. (Original) The three-dimensional image display device according to Claim 1, wherein said device is mounted in a portable device.

13. (Original) The three-dimensional image display device according to Claim 12, wherein said portable device is any one of a cellular phone, a portable terminal, a PDA, a game device, a digital camera, and a digital video camera.

14. (Currently Amended): A three-dimensional image display method, wherein: ~~in which one pixel included in each pixel section,~~

a plurality of said pixel sections are arrayed in [[a]] matrix ~~state~~ form on a display panel, in which one pixel included in each pixel section displays an image for the right eye and ~~the~~ another pixel displays an image for the left eye,

an optical unit emits light, such that light emitted from the pixels displaying said image for the right eye and light emitted from the pixels displaying said image for the left eye, are in directions different from each other,

and a viewer positions a midpoint between the right eye and the left eye in a three-dimensional visible range, such that ~~where~~ the light emitted from the pixels displaying said image for the right eye is made incident to said right eye and the light emitted from the pixels displaying said image for the left eye is made incident to said left eye,

wherein when the normal distance between said midpoint and said display panel is set to D (mm) and the definition of said pixel sections₁ in at least one array direction out of the perpendicular array directions of said pixel sections of said display panel₁ is set to X (dpi), said distance₁ D₁ and said definition₁ X₁ satisfy the following expression[[]]:

$$X \geq \frac{25.4}{D \times \tan(1')}$$

15. (Currently Amended) The three-dimensional image display method according to Claim 14, wherein when the definition of said pixel sections in another array direction, which crosses said one array direction out of the array directions of said pixel sections, is set to Y₁(dpi), said distance₁ D₁ and said definition₁ Y₁ satisfy the following expression[[]]:

$$Y \geq \frac{25.4}{D \times \tan(1')}$$

16. (Original) The three-dimensional image display method according to Claim 14, wherein a liquid crystal display panel is used as said display panel.

17. (Original) The three-dimensional image display method according to Claim 14, wherein a parallax barrier where a plurality of slits, which are arranged for each row of said pixel sections and extend along an extending direction of the row, are formed is used as said optical unit.

18. (Currently Amended) The three-dimensional image display method according to ~~Claims~~ Claim 14, wherein a lenticular lens that is arranged on the viewer side of said display panel, provided with a plurality of cylindrical lenses arranged for each row of said pixel sections and extended along an extending direction of the row, is used as said optical unit.

19. (Currently Amended) A three-dimensional image display method, wherein:
~~in which one pixel included in each pixel section,~~

a plurality of said pixel sections are arrayed in [[a]] matrix ~~state~~ form on a display panel, wherein one pixel included in each section displays an image for the right eye and ~~the other~~ another pixel displays an image for the left eye,

an optical unit emits light emitted from the pixels displaying said image for the right eye and light emitted from the pixels displaying said image for the left eye in directions different from each other,

and a viewer positions a midpoint between the right eye and the left eye in a three-dimensional visible range where the light emitted from the pixels displaying said image for the right eye is made incident to said right eye and the light emitted from the pixels displaying said image for the left eye is made incident to said left eye,

wherein the distance between said midpoint and said display panel is set to 500mm or more, and the definition of said pixel sections in at least one array direction out of the

perpendicular array directions of said pixel sections of said display panel is set to 175 dpi or more.

20. (Original) The three-dimensional image display method according to Claim 19, wherein the definition of said pixel sections in another array direction, which crosses said one array direction out of the array directions of said pixel sections, is set to 175 dpi or more.

21. (Original) The three-dimensional image display method according to Claim 19, wherein a liquid crystal display panel is used as said display panel.

22. (Currently Amended) The three-dimensional image display method according to ~~Claims~~ Claim 19, wherein a parallax barrier where a plurality of slits, which are arranged for each row of said pixel sections and extend along an extending direction of the row, are formed is used as said optical unit.

23. (Currently Amended) The three-dimensional image display method according to ~~Claims~~ Claim 19, wherein a lenticular lens that is arranged on the viewer side of said display panel, provided with a plurality of cylindrical lenses arranged for each row of said pixel sections and extended along an extending direction of the row, is used as said optical unit.

24. (Original) The three-dimensional image display method according to Claim 14, wherein said method displays a three-dimensional moving picture.